Moving to Tiger Server From Windows: A Primer

Session 612

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Enterprise IT

Moving to Tiger Server From Windows: A Primer

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Systems Engineer

http://developer.apple.com/wwdc2005/

What Is This Session About?

- One of Three
  - Windows Admin
  - Mac Programmer/Admin
  - Consultant (who isn't?)
- You have an all (or mostly) Windows shop and you want
  - End server licensing fees
  - A secure server
  - An easier migration than going to AD

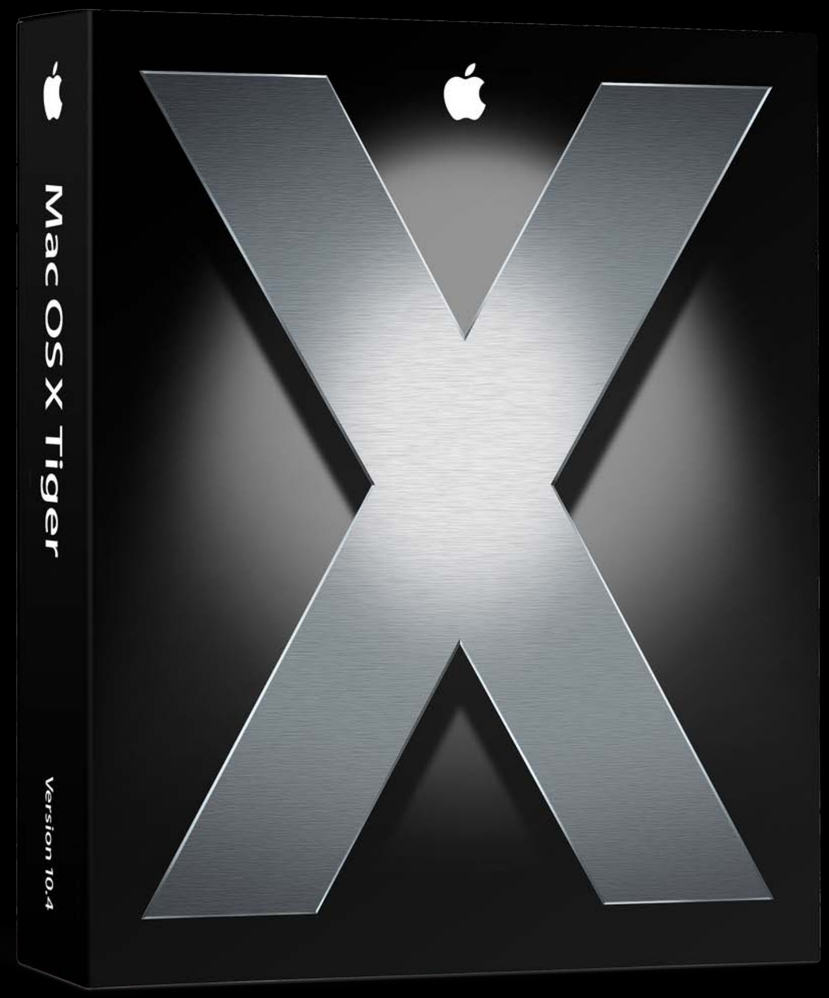
You Have This

You Want This

Without This

How Do You Get There?

- Since we're at WWDC 2005…
- Tiger Server

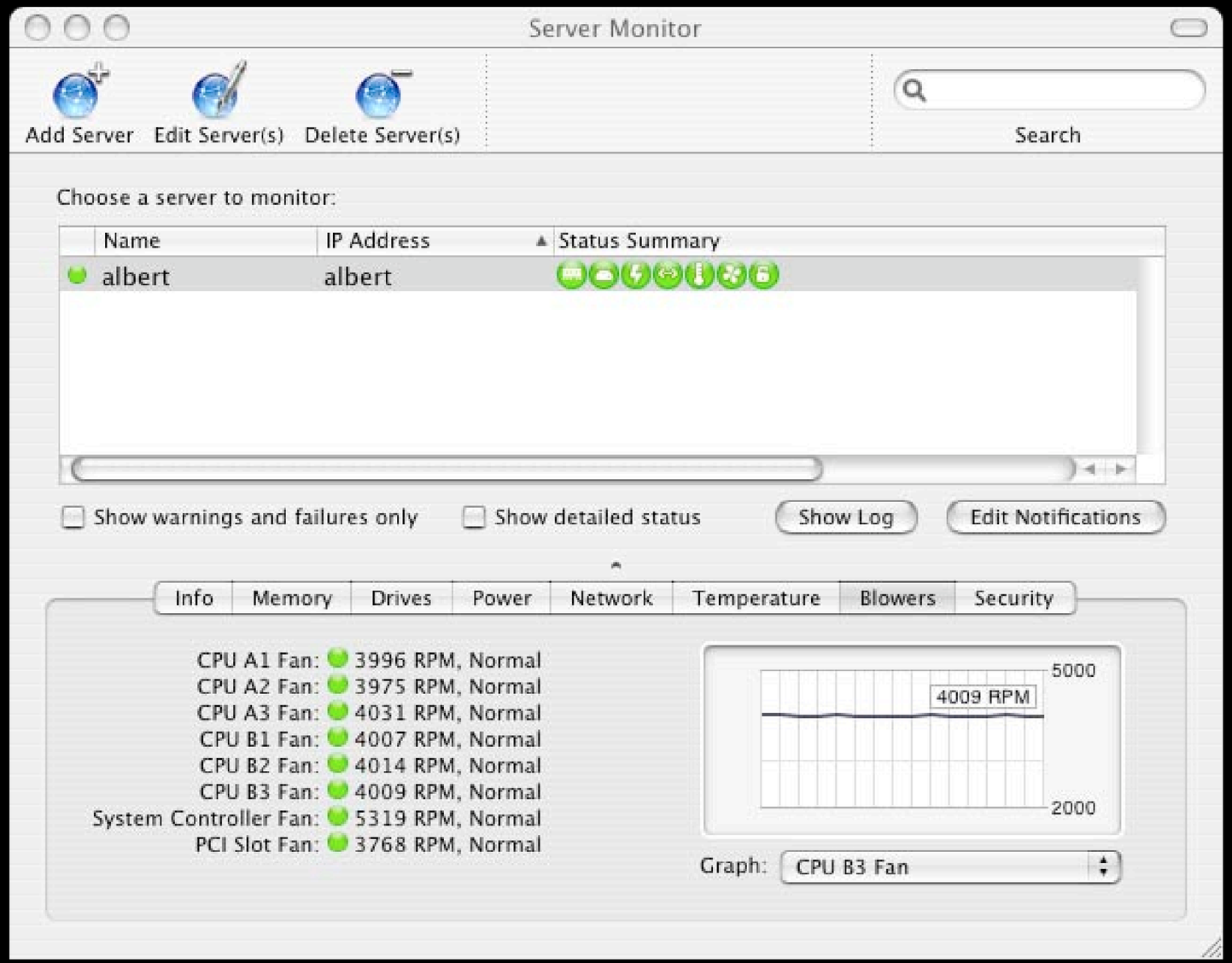


Tiger Server 101

- UNIX-Based
- Open Source Out the Wazoo
- Plays Well With Everyone
- Reliable
- Secure

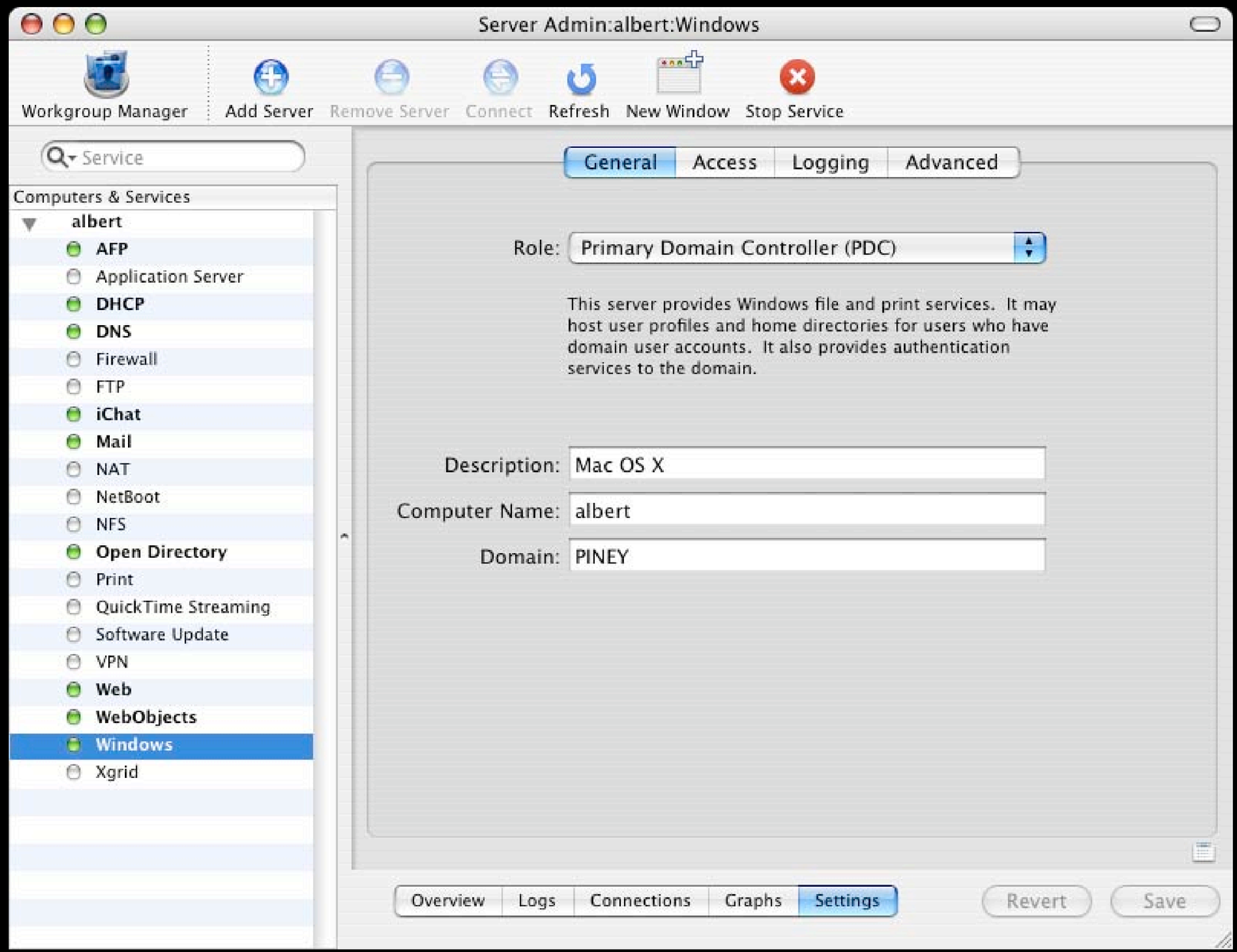
Mac Administration 101

- Server Monitor
  - Hardware



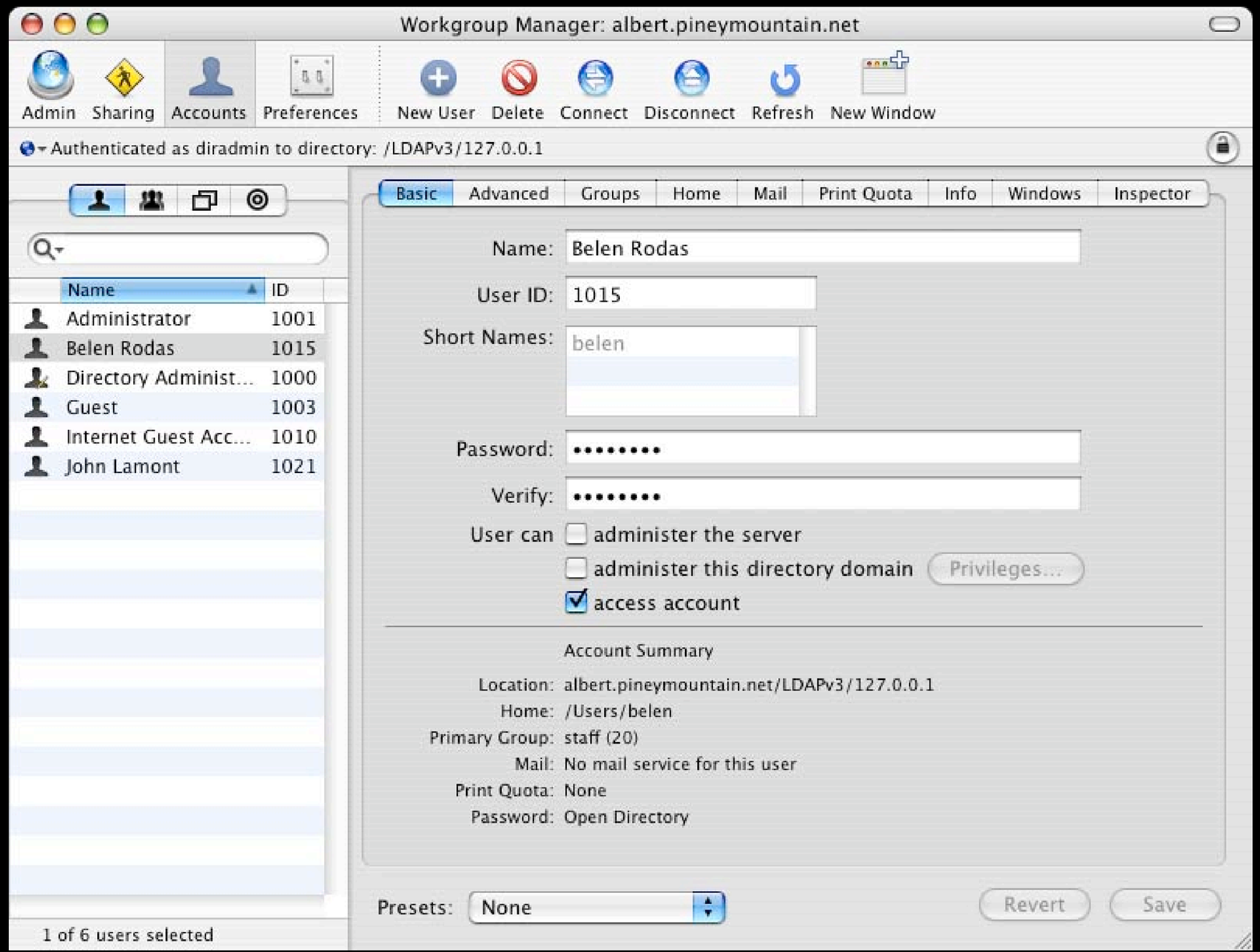
Mac Administration 101

- Server Admin
  - Server Processes



Mac Administration 101

- Workgroup Manager
  - Users, Groups, and Computers

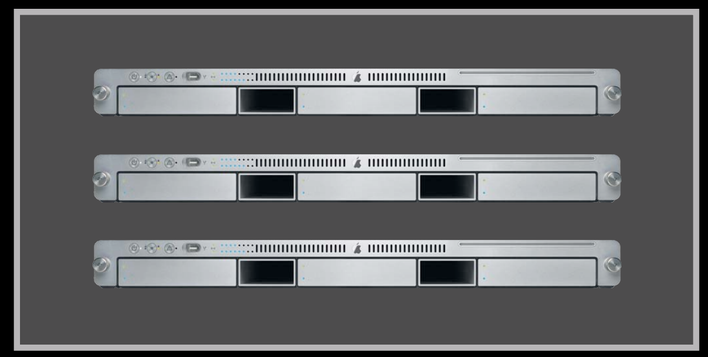


What Do You Have?
(Probably)

Windows NT 4.0	PDC/BDC	Network Drives	Exchange	IIS
Mac OS X Tiger Server	SAMBA	SAMBA	Mac OS X Mail Server	Apache

Windows Machines

Xserves



Windows Machines

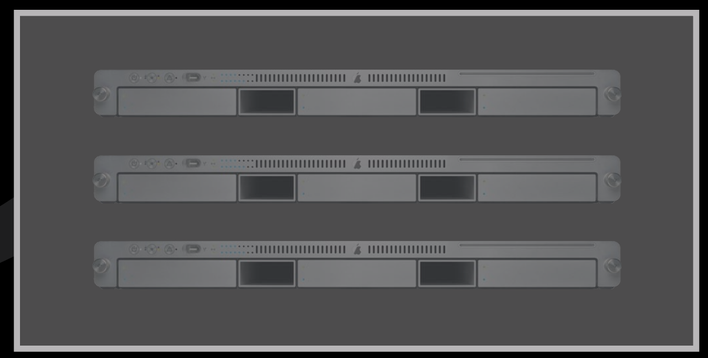
PDC

Mail

Printing

Web

Xserves



Windows Machines

Prepare

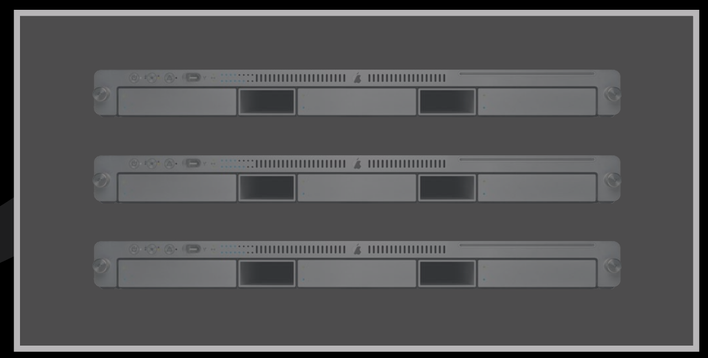
PDC

Mail

Printing

Web

Xserves

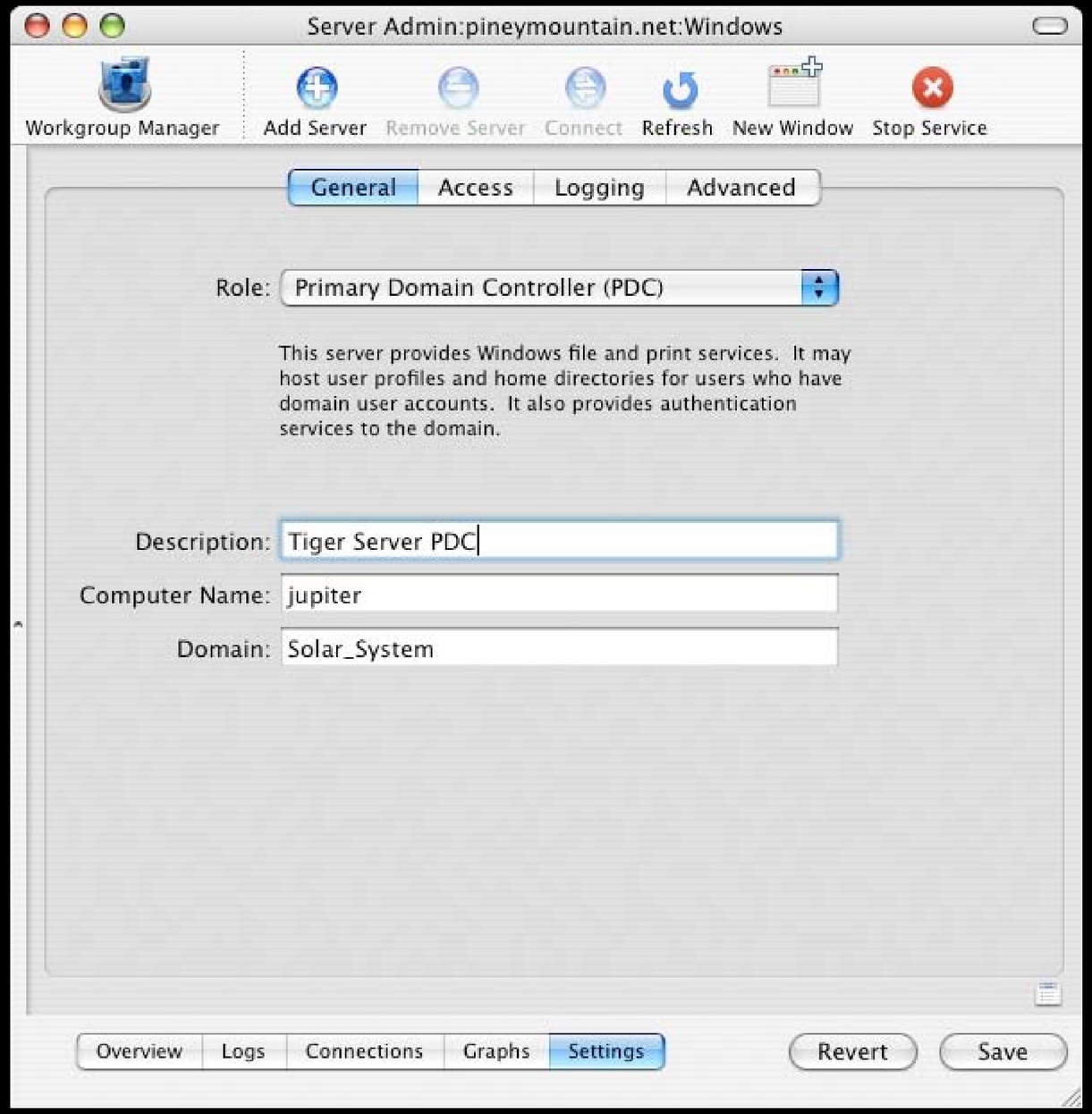


PDC vs. BDC

- PDC: Primary Domain Controller
  - One per network
  - Contains login and password data
- BDC: Backup Domain Controller
  - Many per network
  - Contains a copy of the login and password data

PDC Creation

- Server Admin: Windows
- Open Directory Master



Windows Machines

Prepare

Migrate the users

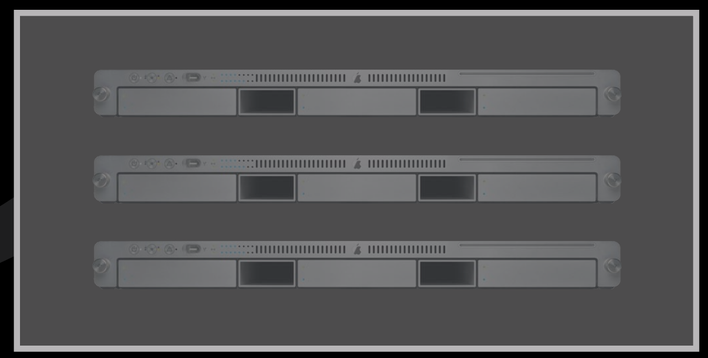
PDC

Mail

Printing

Web

Xserves

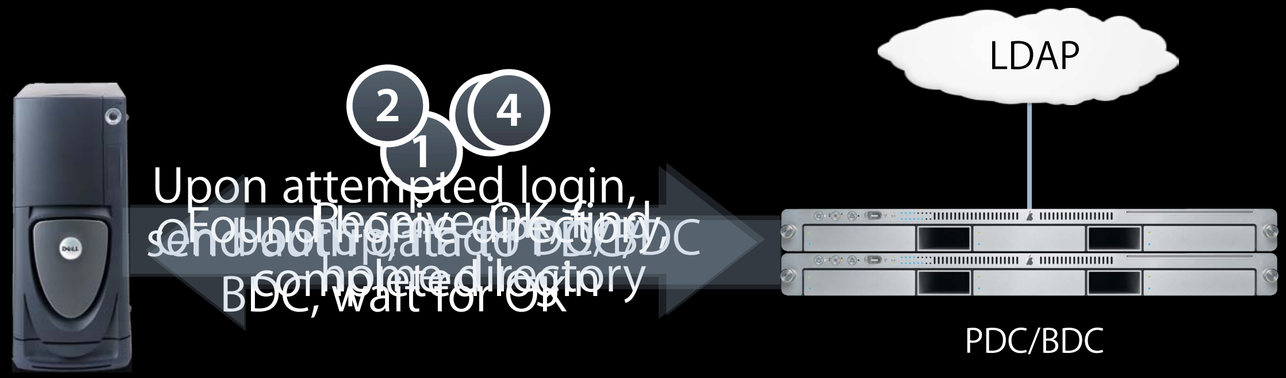


We’re Here

- Logging in using our Windows-based PDC/BDC
- Home directory can be anywhere

Want to Get Here

- Same login to the clients
- Using Tiger Server



NT Migration Tool

- A shell script
  - `/usr/sbin/ntdomainmigration.sh`
- Executes a number of Samba based commands
- Out of the box integration with OD

NT Migration Tool

```
ntdomainmigration.sh <NT Domain> <NT Server Name>
<NT Domain admin> <LDAP admin>
```

- ServerAdmin commands created in `/var/spool/samba:`
  - serverRole to become backupdomaincontroller
  - User and password information for the domain and OD
- Flushes `lookupd` cache
- Executes `net rpc vampire -S NT_Server_Name -w NT_Domain -U Domain_Admin%Password`

Windows Machines

PDC

Prepare

Migrate the users

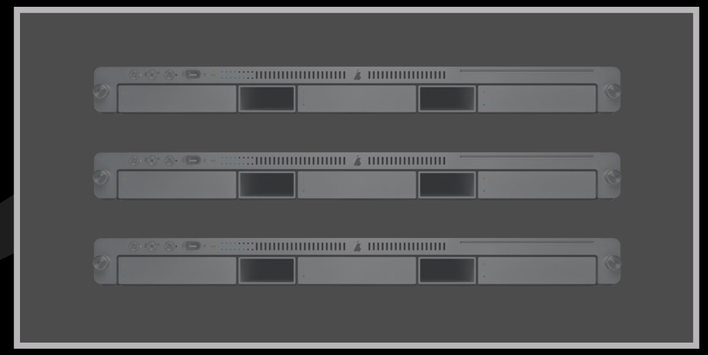
Move Home Directories

Mail

Printing

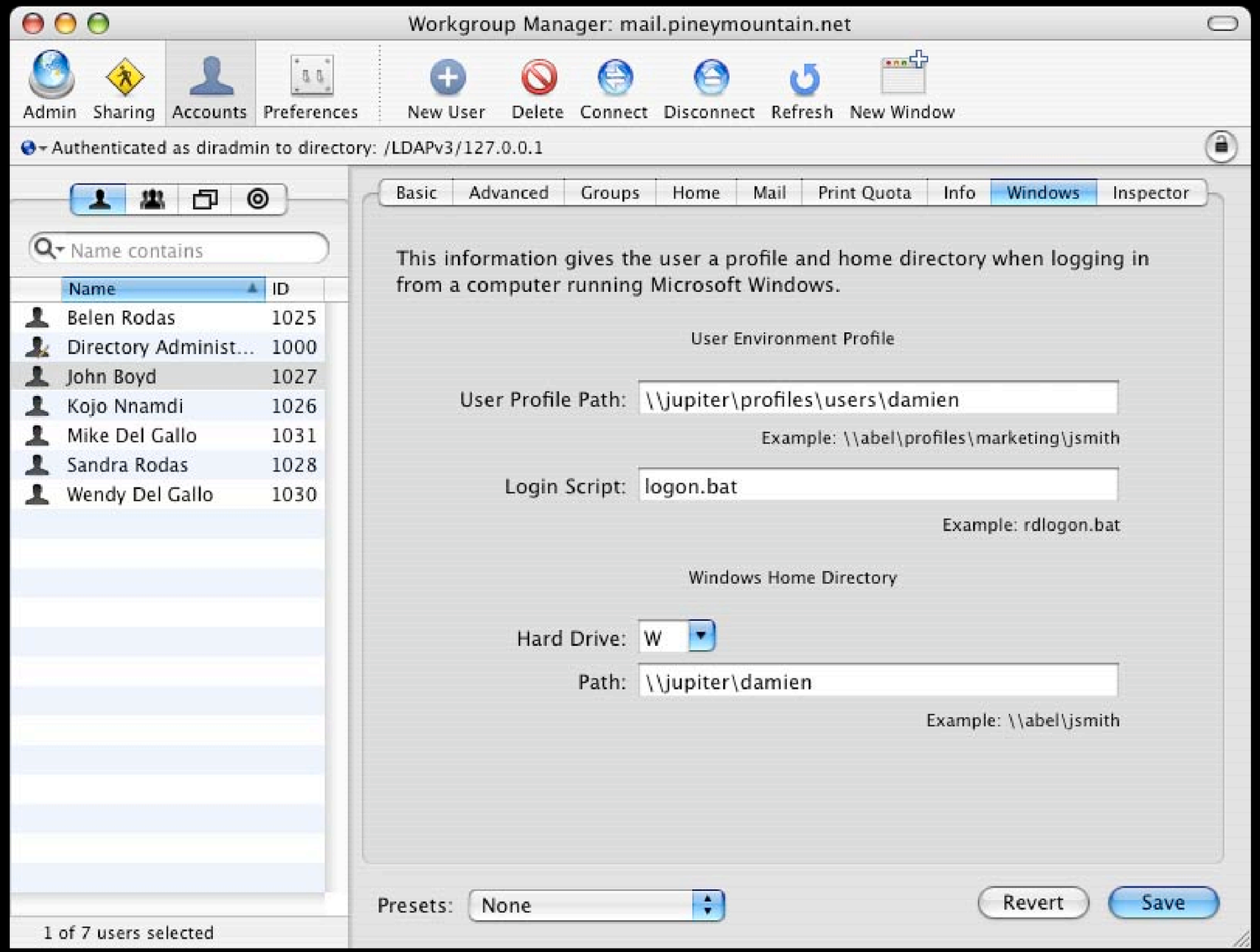
Web

Xserve



Share Migration

- Windows Panel within Workgroup Manager



Windows Machines

PDC

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Move Home Directories

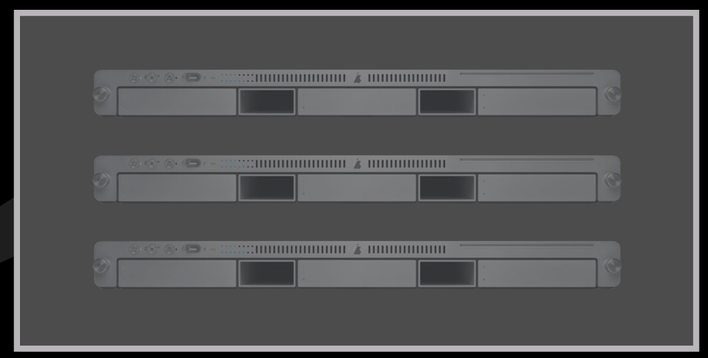
Turn on Windows Service

Mail

Printing

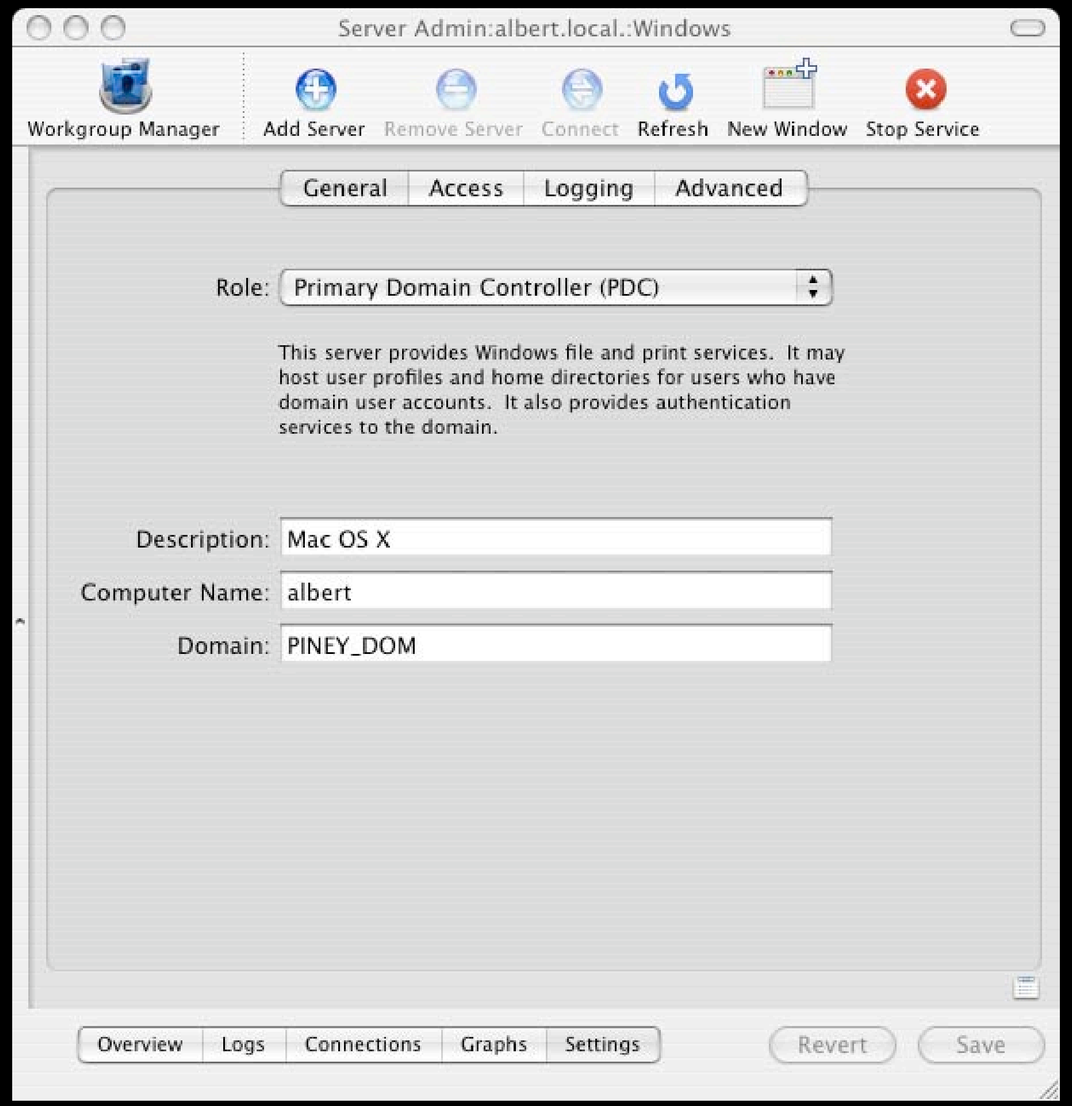
Web

Xserves



Turn on Windows (Service)

- Make it a PDC



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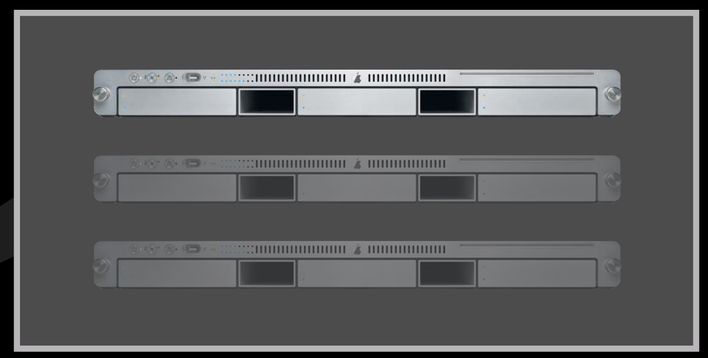

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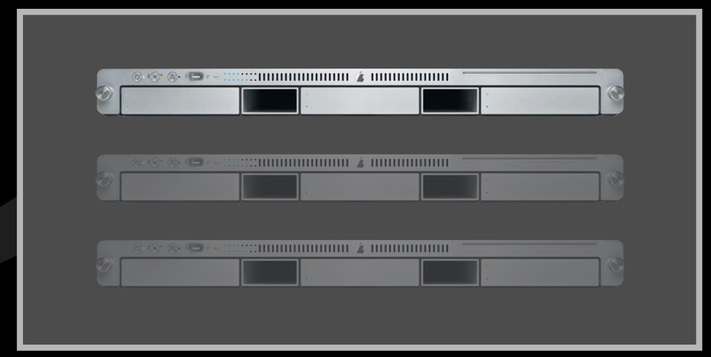

Mail Migration

- NT 4.0 running Exchange
  - We migrate the authentication data
  - IMAP mode for Exchange
  - Have clients move data IMAP to IMAP via Mail.app

Windows Machines

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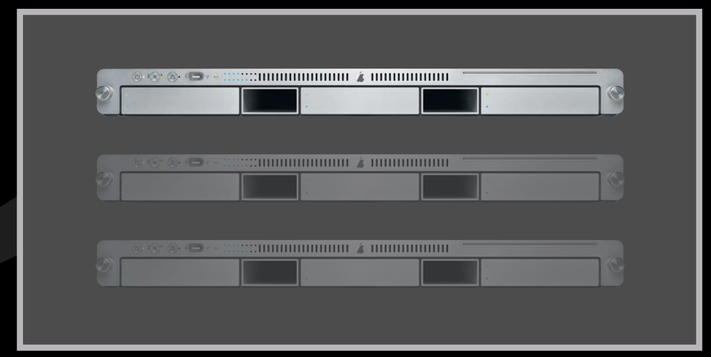
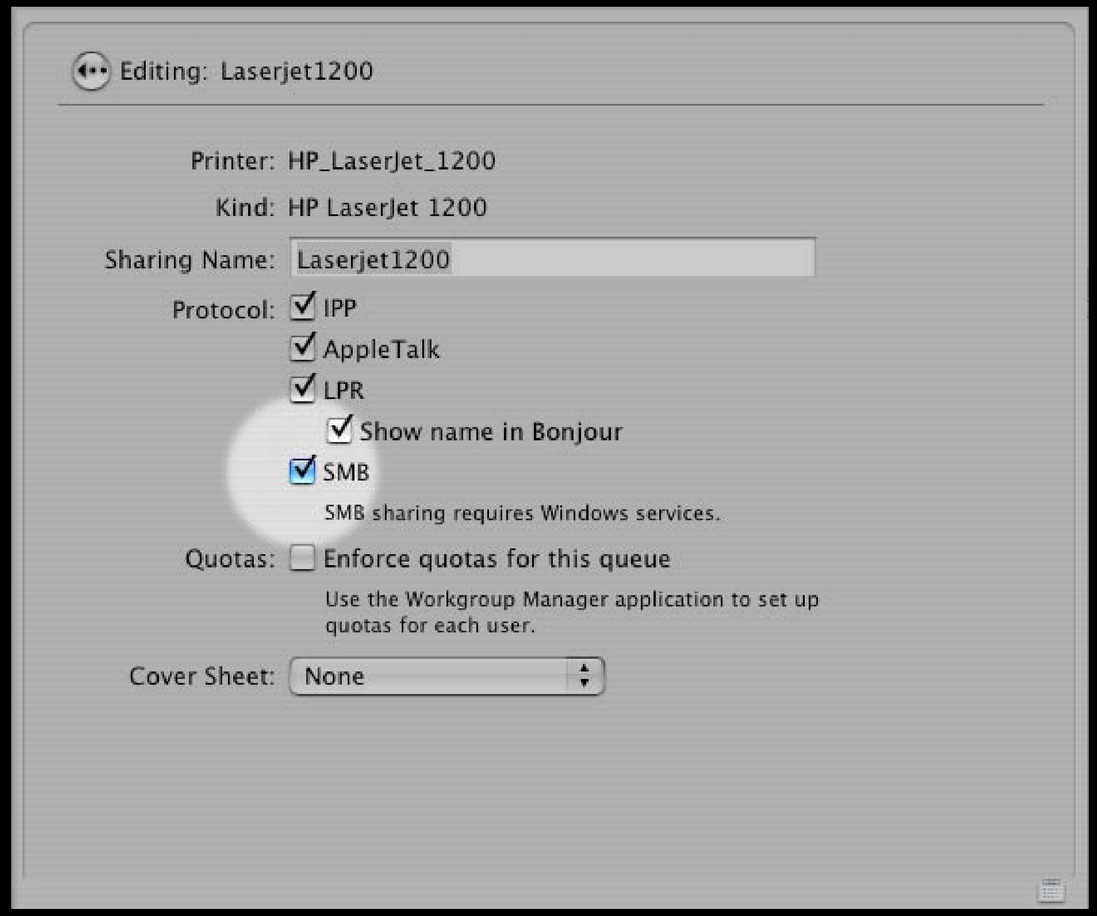


Printing

- SMB printing as easy as a checkbox



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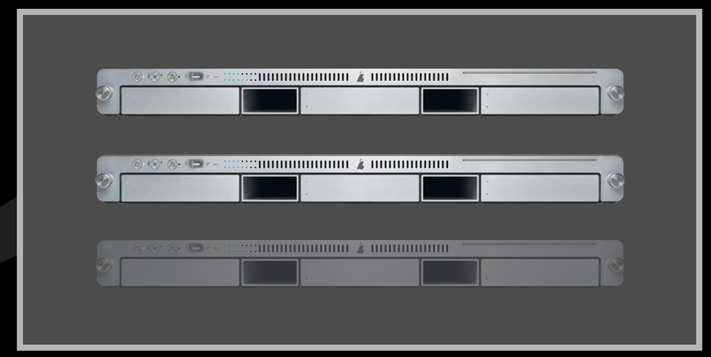
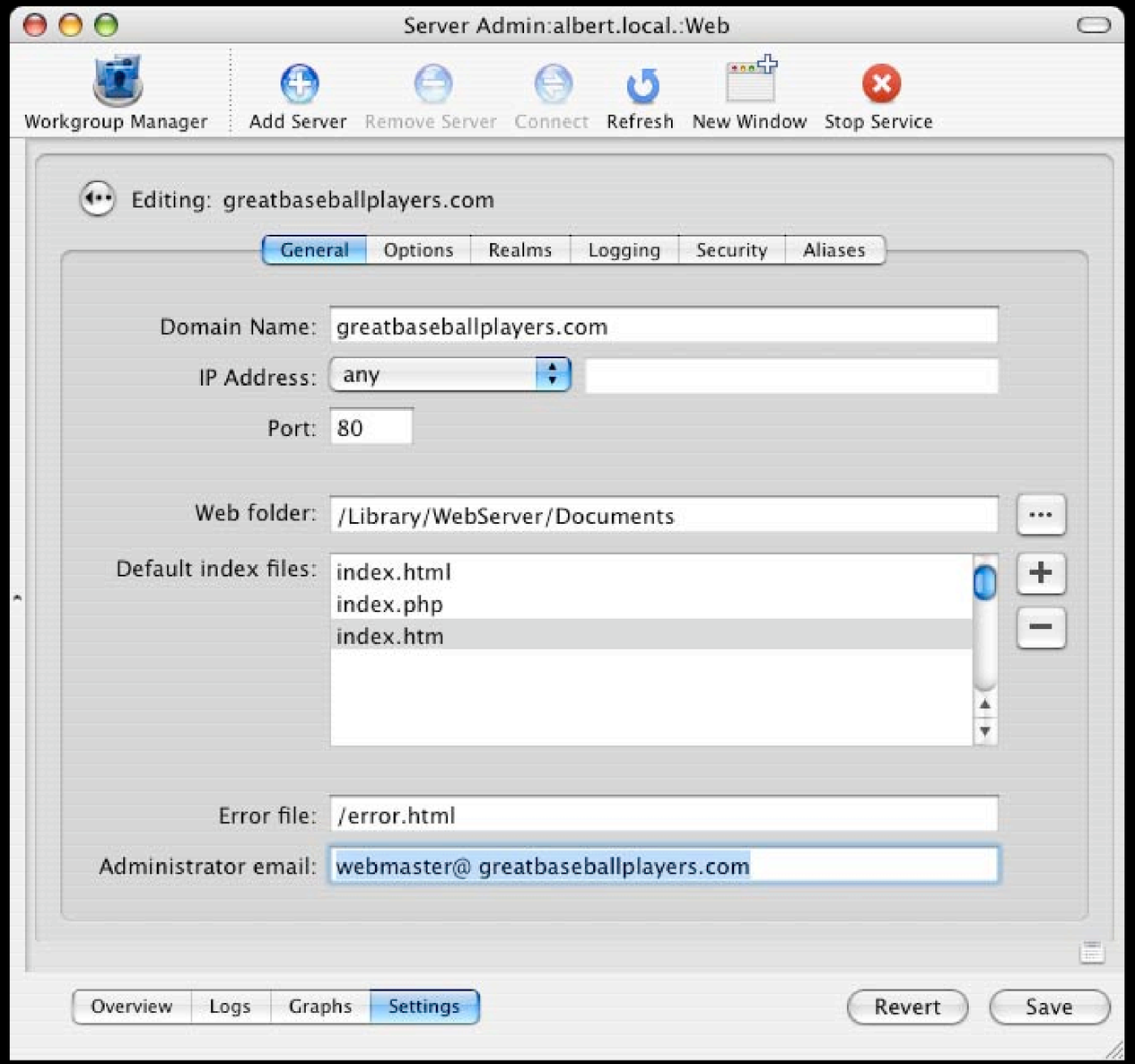


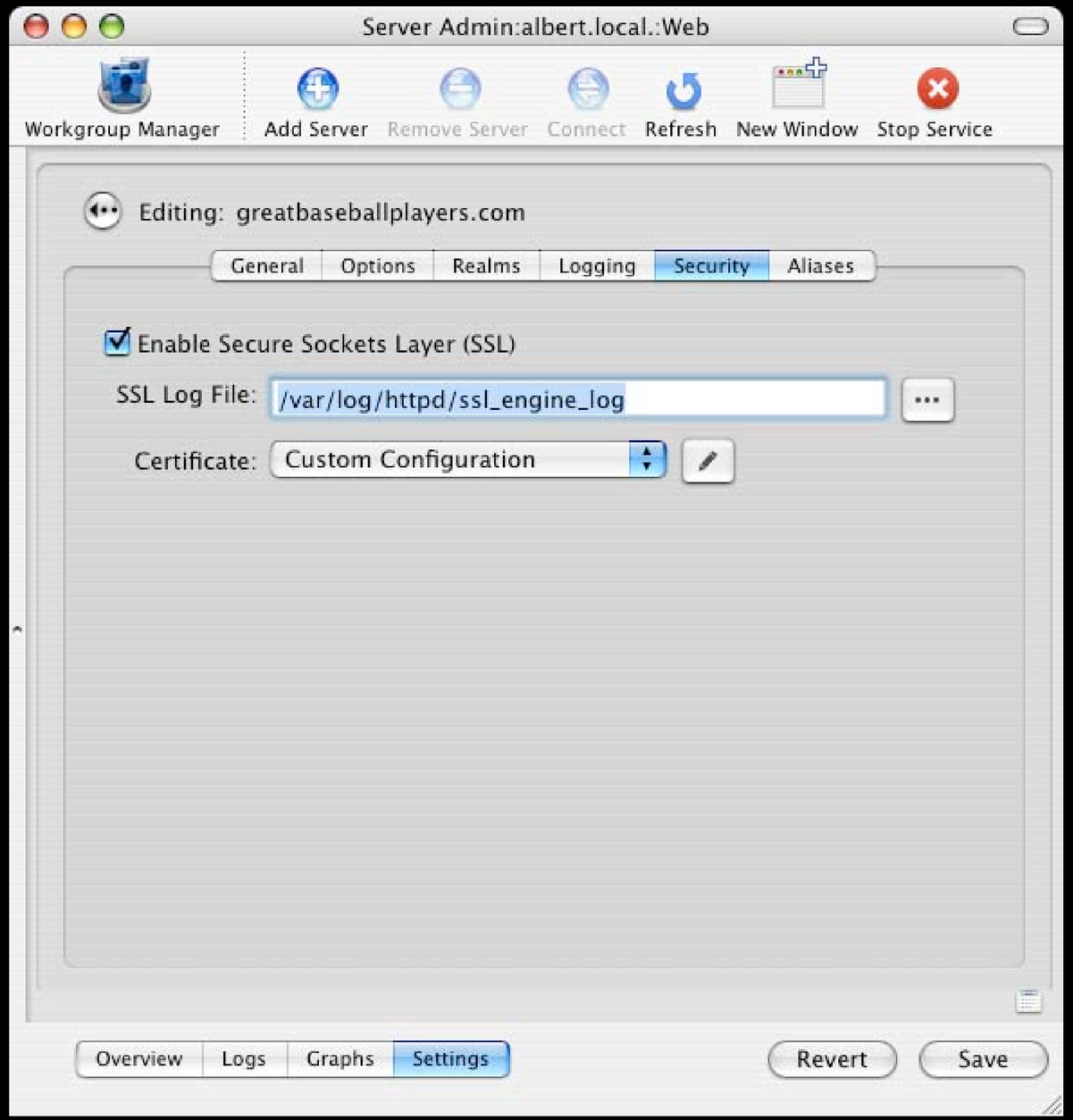
Apache Migration

- Move html files to /Library/WebServer/Documents
- Add to “Default index files” a “index.htm” reference



Apache Migration

- Certificates
  - Built-in self signed
  - Easy to add new ones



Apache Migration

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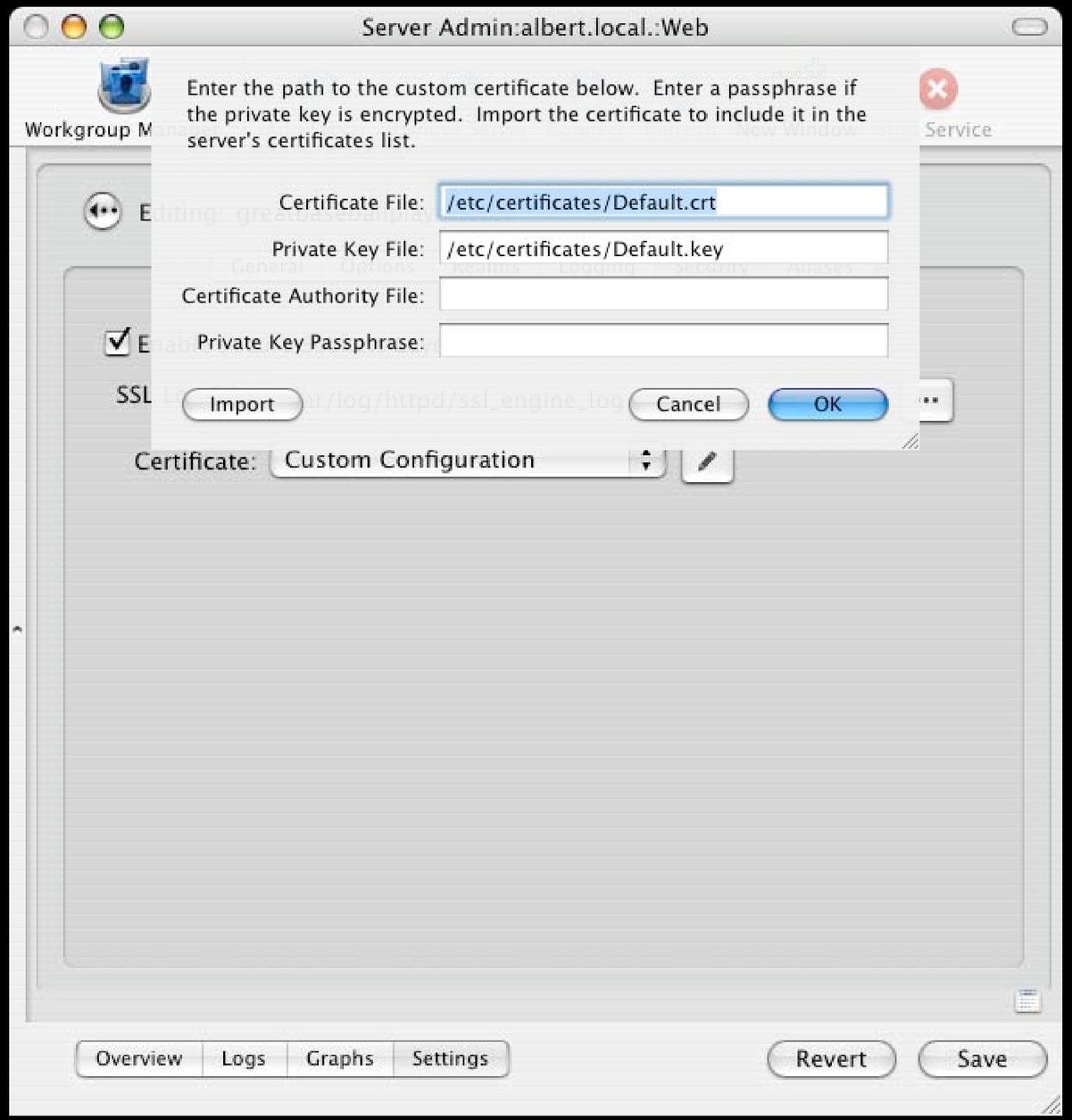

Windows Machines

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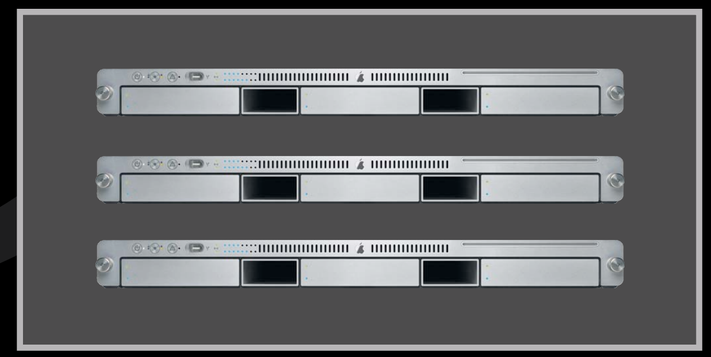


Remote Management

- ssh

```
serveradmin status smb
   smb:state = "STOPPED"
serveradmin fullstatus smb
   smb:guestAccess = "NO"
   smb:logging = "NO"
   smb:currentThroughput = 0
   smb:state = "STOPPED"
   smb:logPaths:fileServiceLog = "/var/log/samba/log.smbd"
   smb:logPaths:nameServiceLog = "/var/log/samba/log.nmbd"
   smb:currentConnections = 0
```

Remote Management

```
serveradmin start smb
  smb:state = "RUNNING"
serveradmin stop smb
  smb:state = “STOPPED”
serveradmin settings smb:logPaths:fileServiceLog = “/RAID/logs/smbd.log”
  smb:logPaths:fileServiceLog = “/RAID/logs/smbd.log”
serveradmin settings smb:server string = “Enterprise File Server”
  smb:server string = "Enterprise File Server"
serveradmin settings smb
  smb:server string = "Mac OS X"
```

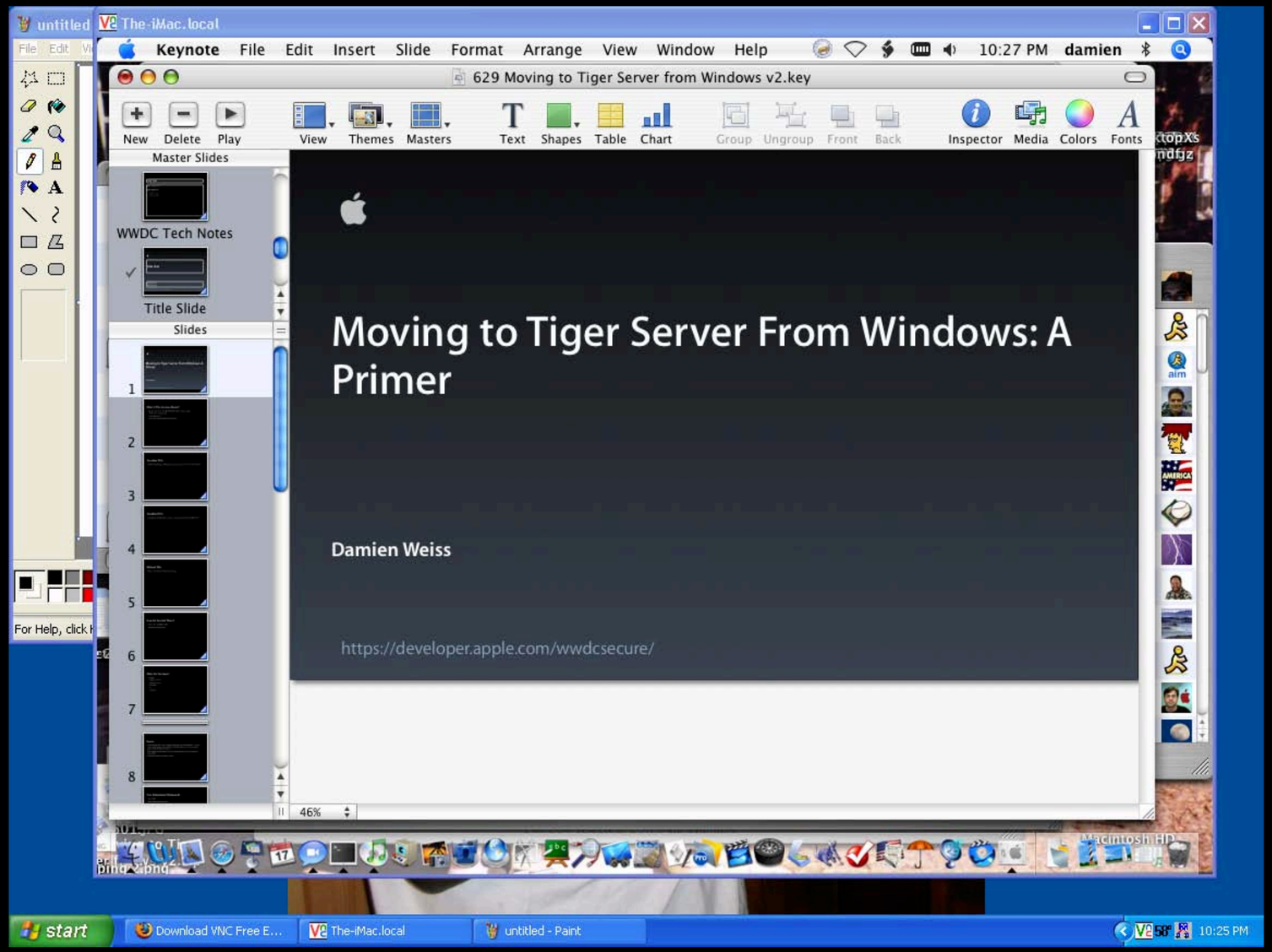
Remote Management—Hardware

- 1900544/65536 = 29 C

```
serveradmin command xserve:command = status
  xserve:Status:Sensors:_array_index:8:location = "CPU 1 Ambient"
  xserve:Status:Sensors:_array_index:8:current-value = 1900544
  xserve:Status:Identity:Version = "10.4"
  xserve:Status:Identity:OSBuild = "8A428"
  xserve:Status:Identity:Serial = "QP50403ZSLW"
```

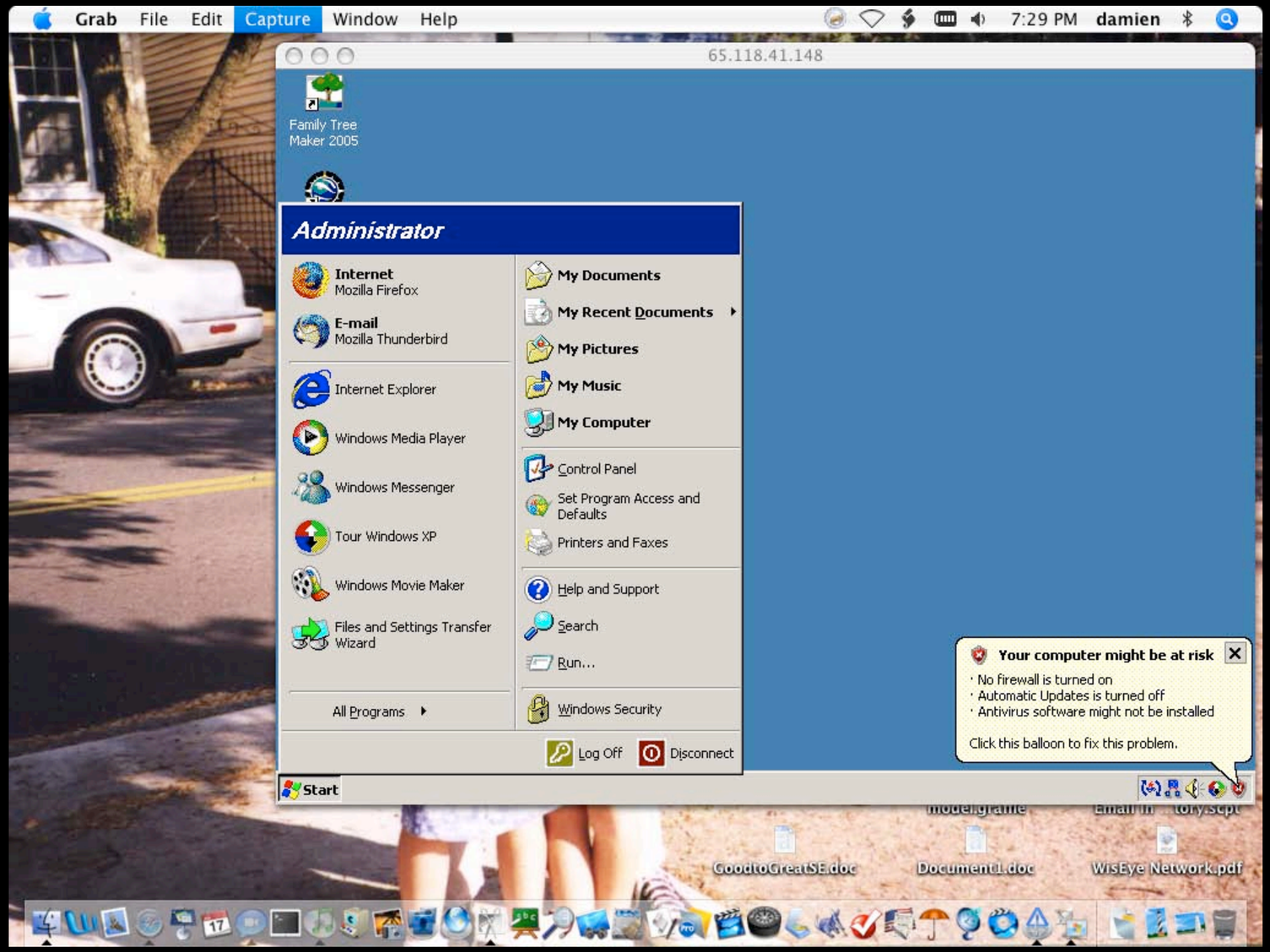
Remote Management

- VNC
  - RealVNC
  - FreeVNC



Remote Management

- Remote Desktop Connection



But, That's Not All

- DNS, DHCP, Jabber Server, NAT, Firewall, FTP, VPN...
- 3rd Party Products
  - Kerio and Communigate
  - Meeting Maker

More Information

http://developer.apple.com/wwdc2005/

Documentation, Sample Code, and Other Resources

http://developer.apple.com/wwdc2005/

Related Sessions

Mac OS X Server Overview	Session 603 Tuesday 9:00AM
Active Directory Integration	Session 608 Tuesday 3:30PM
Managing Clients in the Enterprise	Session 621 Wednesday 5:00PM
Integrating Mac OS X into a Heterogeneous Environment	Session 625 Thursday 9:00AM

Related Sessions

Enterprise Messaging Solutions	Session 633 Friday 9:00AM
Monitoring Your System With ARD and Open Source Tools	Session 629 Thursday 2:00PM
Real-World Desktop Management Practices	Session 644 Friday 5:00PM
Extending and Securing Mail Services Using Mac OS X	Session 646 Friday 5:00AM

Q&A

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Manager, Developer Technical Support
jguy@apple.com

http://developer.apple.com/wwdc2005/

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Worldwide Developers Conference